IN THE SPECIFICATION

Please amend the specification as indicated below:

Please replace the abstract with the following paragraph:

ABSTRACT

~~An improved method for transmitting a signal from a wireless base station applies digital path gain to the signal before input to the digital-to-analog converter. Thereafter, using any known~~Presented is a method for reducing the peak to average ratio where the signal is multiplied prior to digital to analog conversion and subsequently subject to the full scale of a digital to analog converter, disproportionably amplifying the average signal more than peak signals, reducing the ratio of the peak signal to the average signal. ~~the signal peaks are constrained by the maximum power that the transmitter can tolerate. This effectively increases the root mean square voltage of the signal while maintaining the peak voltage. As a result the peak to rms ratio is reduced. By reducing the peak to rms ratio at the digital end of the transmitter analog amplification headroom can be reduced, thus reducing cost and size of the radio and RF amplifier.~~

Please replace paragraph [03] beginning on page 3 with the following paragraph:

To digitally amplify the signal while constraining the peak values to the full-scale range of the DAC, which receives x bits, the scaling factor used to digitally amplify the signal is approximately, (2^x-1)/peak voltage. More specifically and accounting for the fact that the AC signal is centered on the DAC range, the scaling factor is more precisely reduced to $(2^{x-1}-1)$/peak voltage. This factor can be preset in the DAC or it may be dynamically selected with a periodic determination of the peak power of the signal, as further described below.

Please replace paragraph [03] beginning on page 7 with the following paragraph:

Using the maximum I and Q values, Controller 40 calculates the desired digital gain for a particular D/A converter of a particular capacity. For the case of a 12 bit D/A converter, the desired digital gain for each quadrature component is computed as $[2^{(12-1)}-1]/(295*10^{8dB/20})$. For this calculation, the controller 40 considers the maximum expected I and Q outputs (295), the constraining peak-to-average ratio set-point (8dB) and the size of the D/A converter (12 bits). For this example, that number is 2.76. This represents the desired digital gain scaling factor.

Please replace paragraph [04] beginning on page 7 and continuing on page 8 with the following paragraph:

Next, Controller 40 computes the closest analog gain reduction setting based on the analog gain savings designed in the specific radio used by the base station, the current analog gain reduction setting of the base station and the desired digital gain computed in the prior step. Using typical values: -9dB (analog gain savings of radio); 3dB (current analog gain reduction); and 8.8dB (the closest allowed analog gain reduction for a desired digital gain scaling factor of 2.76, computed as 20 $\log_{10}$ 2.76 rounded to the nearest tenth), the actual analog gain reduction is -9dB + 3dB + 8.8 dB = 2.8dB. This 2.8dB analog gain reduction is sent to radio 70.

Please replace paragraph [01] beginning on page 8 with the following paragraph:

Finally, the actual digital gain is computed by Controller 40 using the closest allowed analog gain reduction of 8.8dB. Thus the actual digital gain for each of the I and Q components is $10^{8.8dB/20}$, which equals 2.75. This 2.75 multiplier is the actual scaling factor sent to each of the multipliers 20 and 22.